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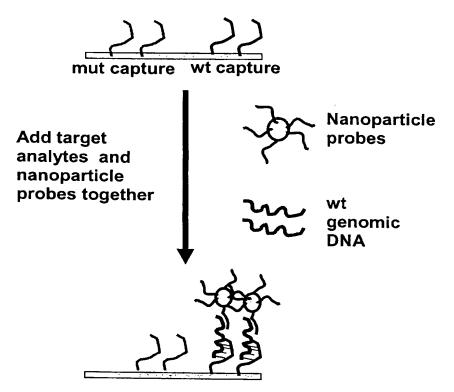
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FIG. 1

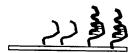


Specific binding of nanoparticle probes to wt capture probes via wt target analyte in a sandwich format





hybridize wt DNA to capture probes under high stringency



Capture of wt target analytes by wt capture probes only

Add high sensitivity detection probes to detect



High sensitivity nanoparticle probes



FIG. 3

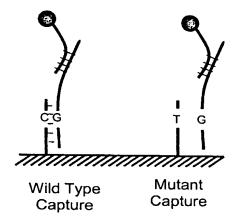
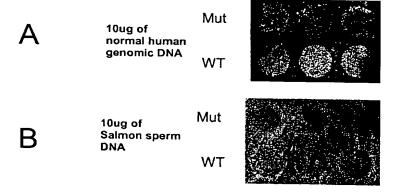


FIG. 4



C

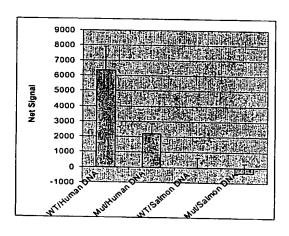
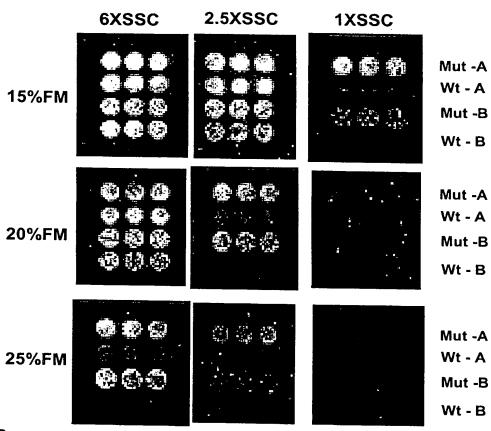


FIG. 5

Salt Concentration



Formamide Concentration

FIG. 6

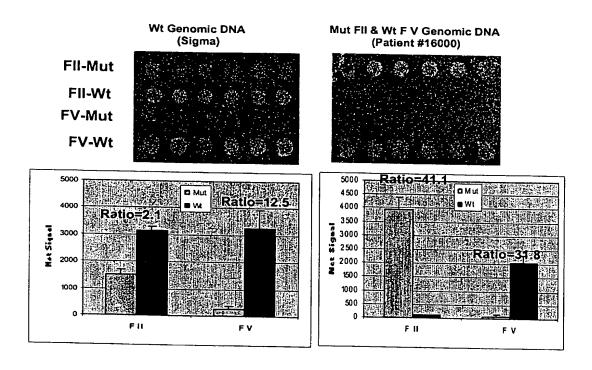
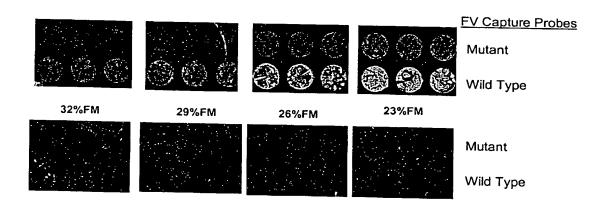


FIG. 7

A



В

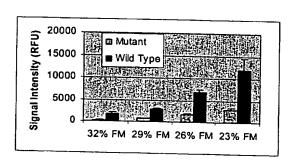
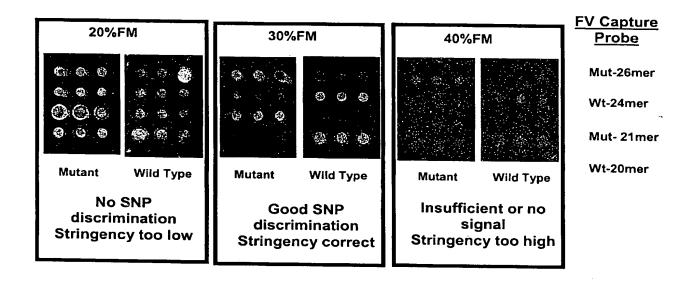
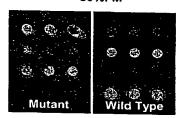


FIG. 8



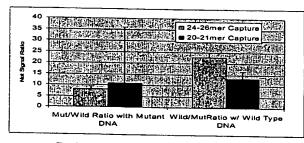
30%FM



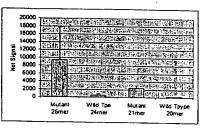
FV Capture Probes
Mutant 26mer

Wild type 24mer Mutant 21mer

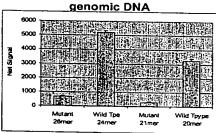
Wild type 20mer



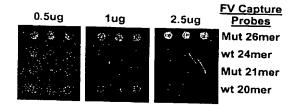
Ratio of signal intensities



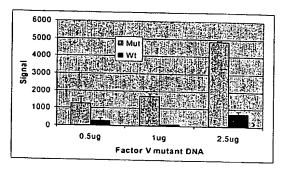
Hybridization with mutant



Hybridization with wild type genomic DNA

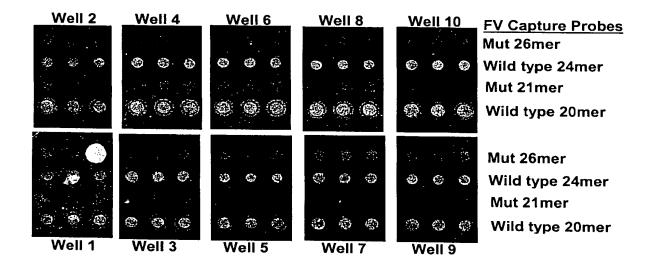


Images of Fac.V array hybridized with mutant genomic DNA.



Signal intensities for mutant (26mer) and wild type (24mer) capture probes

FIG. 11



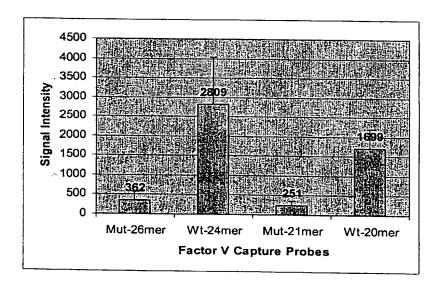


FIG. 12

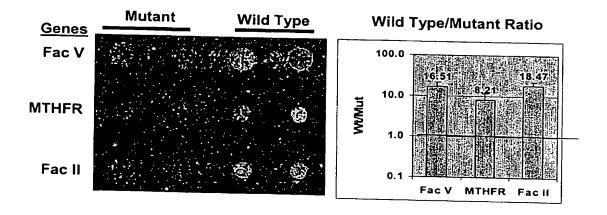


FIG. 13

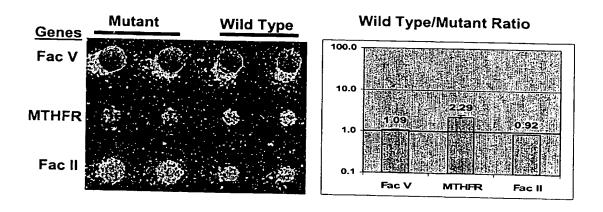
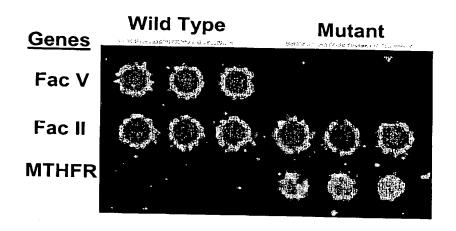


FIG. 14



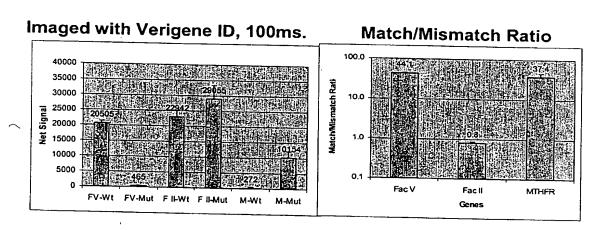
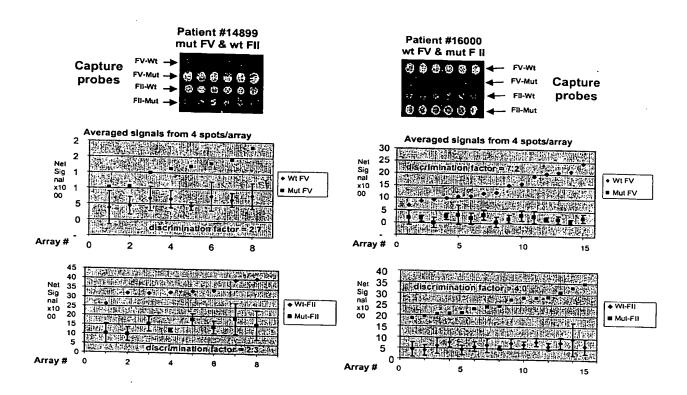
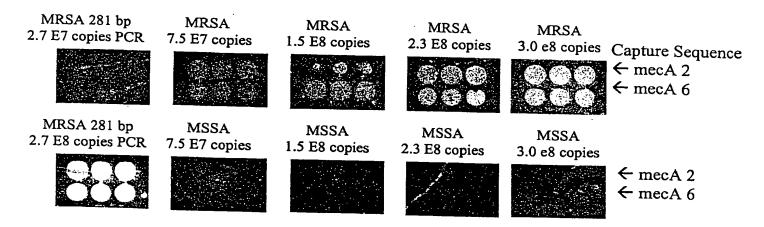


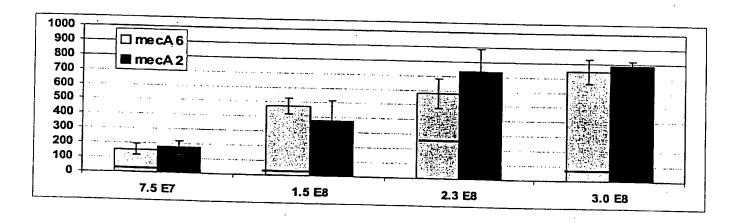
FIG. 15

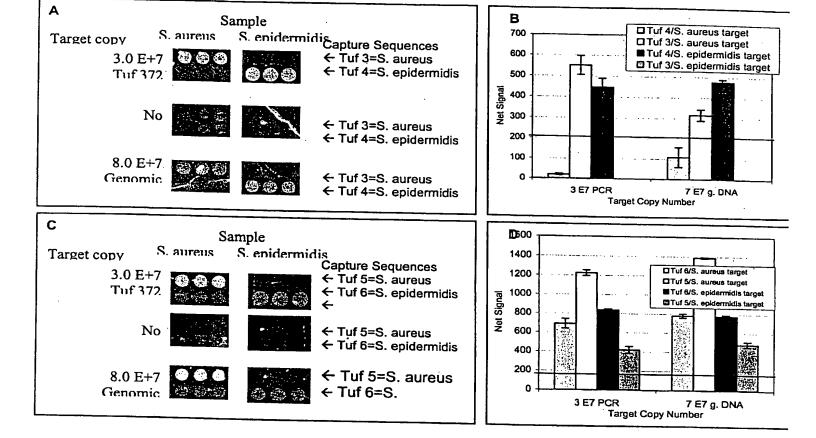


A



B





Name Template Species gene Length Sequence 5' → 3' (coding strand)
mecA 281 S. aureus mecA 281

Tuf 142 *S. aureus Tuf* 142
GTGGTCAAGTATTAGCTGCTCCTGGTTCAATTACACCACATACTGAATTCAAAGCAGAAGTATACGTATTATCAAAA
GACGAAGGTGGACGTCACACCCCATTCTTCTCARACTATCGTCCACAATTCTATTTCCGTACTAC

Tuf 372 S. aureus Tuf 372
TGATGCCRGTTGAGGACGTATTCTCAATCACTGGTCGTGGTACTGTTGCTACAGGCCGTGTTGAACGTGGTCAAATC
AAAGTTGGTGAAGAAGTTGAAATCATCGGTTTACATGACACATCTAAAACAACTGTTACAGGTGTTGAAATGTTCCG
TAAATTATTAGACTACGCTGAAGCTGGTGACAACATTGGTGCATTATTACGTGGTGTTGCTCGTGAAGACGTACAAC
GTGGTCAAGTATTAGCTGCTCCTGGTTCAATTACACCACATACTGAATTCAAAGCAGAAGTATACGTATTATCAAAA
GACGAAGGTGGACGTCACACTCCATTCTTCTCARACTATCGTCCACAATTCTATTTCCGTACTAC

FIG. 19

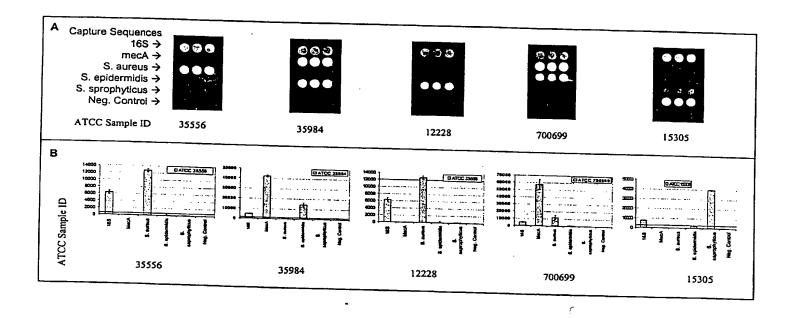


FIG. 20

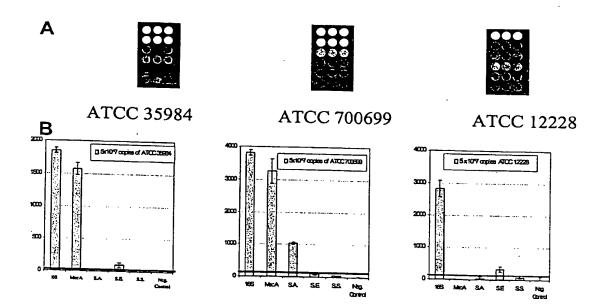


FIG. 21

